MI COVID RESPONSE DATA AND MODELING UPDATE

NOTE: All data as of May 29 unless otherwise noted

June 1, 2021

Executive summary

Percent Positivity is down 25% and **Case Rate** is down 35% since last week. Positivity (5.1%, ↓1.7%) and case rates (97.3, ↓52.5) have decreased for seven weeks

> Michigan has the **7th highest number of cases (↓4),** and **12th highest case rate (↓9)** in the last 7 days (source: CDC COVID Data Tracker)

Percent of inpatient beds occupied by individuals with COVID has decreased 23% since last week and is decreasing for five weeks. There are 6.1% (↓1.8%) inpatient beds occupied by COVID-19 patients.

> Michigan has the **4th highest inpatient bed utilization (↓3),** and the **3rd highest adult ICU bed utilization (↓2)** in the country (source: US HHS Protect)

Deaths have decreased 32% since last week. There were 248 COVID deaths (↓117) between May 16 and May 22, and the **Death Rate** is 3.6 deaths per million residents (↓1.7)

> Michigan has the **10th highest number of deaths (↓3)**, and **11th highest death rate (↓7)** in the last 7 days (source: CDC COVID Data Tracker)

The 7-day average **state testing rate** has decreased to 2,003.3 tests/million/day (↓425.5). **Daily diagnostic tests (PCR)** is 19.9K per day (↓4.2), and the **weekly average for PCR and antigen tests** conducted in Michigan is 35.2K (↓8.3K).

8.7 million **COVID-19 vaccine** doses reported to CDC, 4.2 million people have completed their vaccine series

Comparison across states: Summary

What we see today (data through 5/27):

- 2 states are seeing increasing <u>1</u> week case trends (>=10%) (down from 4 last week)

- 9 states are seeing 1 week increases (>=10%) in new COVID hospital admissions (up from 4 last week) but all have very low baselines

- DC, West Virginia, Pennsylvania, Michigan and Florida have highest per capita <u>hospitalized</u> patient numbers.

- Midwest (case data from CDC as of 5/29):
  - Wisconsin with <u>decrease</u> in hospitalizations (45/M) and <u>decrease</u> in cases (30/100k last 7d)
  - Indiana with <u>stable</u> hospitalizations (111/M), and <u>decrease</u> in cases (55/100k last 7d)
  - Illinois showing <u>decrease</u> in hospitalizations (98/M), and <u>decrease</u> cases (51/100k last 7d)
  - Ohio with <u>decrease</u> in hospitalizations (99/M) and <u>decrease</u> in cases (42/100k last 7d)
  - Michigan showing <u>decrease</u> in hospitalizations (119/M) and <u>stable</u> cases (56/100k last 7d)

COVID-19 Spread

Statewide positivity has decreased to 5.1%

- One week decrease of 25% (vs. 20% decrease last week)

- Decreasing for seven weeks (73% decrease since April 8 high)

- Positivity is declining in all MERC regions and below 7% in six regions

Case rate (97.3 cases/million) is decreasing in the state (127.1 cases/million last week)

- One week decrease of 35% (vs. 35% decrease last week)
- Decreasing for seven weeks (86% decrease since April 11 high)
- Cases per million are declining in all MERC regions
- Variants of Concern in Michigan: 11,110 confirmed B.1.1.7; 67 confirmed B.1.351; 299 confirmed B.1.427/B.1.429; 234 confirmed P.1

- Number of active outbreaks is down 22% from last week
  — Reported school outbreaks have decreased since last week (275 to 217)
  — High schools continue to experience the highest number of outbreaks (96)
  — In the past week, the highest number of new clusters have been identified in general athletics, baseball/softball, and track and field

Confirmed and probable case indicators

Table Date: 5/29/2021 (7 days from date table was produced: 5/22/2021)

Risk levels

Low A B C D E

	Overall Risk Level	Absolute Cases (per million)	CDC Case Trend	Average Percent Positivity	Positivity Trend	Tests (per million)	% IP Beds Occupied by COVID-19 Cases	% Occupied IP Beds Trend	Absolute Deaths (per million)	Death Trend
Detroit	D	85.2	decline [47 days]	4.3	Decrease - 7wk	2008.3	5.6	Decrease - 5wk	3.4	Decrease - 3wk
Grand Rapids	D	137.3	decline [41 days]	7.3	Decrease - 6wk	2127.6	8.9	Decrease - 5wk	3.7	Decrease - 2wk
Kalamazoo	D	114.2	decline [43 days]	6.0	Decrease - 6wk	1849.0	7.1	Decrease - 5wk	3.4	Decrease - 1wk
Saginaw	D	115.2	decline [45 days]	7.0	Decrease - 6wk	1716.0	5.1	Decrease - 5wk	6.3	Decrease - 1wk
Lansing	D	81.6	decline [49 days]	4.7	Decrease - 6wk	1626.0	8.1	Decrease - 5wk	3.7	<20 wkly deaths
Traverse City	D	76.0	decline [46 days]	4.3	Decrease - 3wk	1472.5	3.8	Decrease - 6wk	2.6	<20 wkly deaths
Jackson	D	90.9	decline [45 days]	4.6	Decrease - 6wk	2220.9	9.9	Decrease - 5wk	2.8	<20 wkly deaths
Upper Peninsula	D	85.1	decline [43 days]	2.5	Decrease - 6wk	1940.6	3.1	Decrease - 5wk	1.9	<20 wkly deaths
Michigan	D	97.3	decline [46 days]	5.1	Decrease - 7wk	2003.3	6.1	Decrease - 5wk	3.6	Decrease - 3wk

Cases Low: <7 A: 7-20 B: 20-40 C: 40-70 D: 70-150 E: >=150

Positivity Low: <3% A: 3-7% B: 7-10% C: 10-15% D: 15-20% E: >=20%
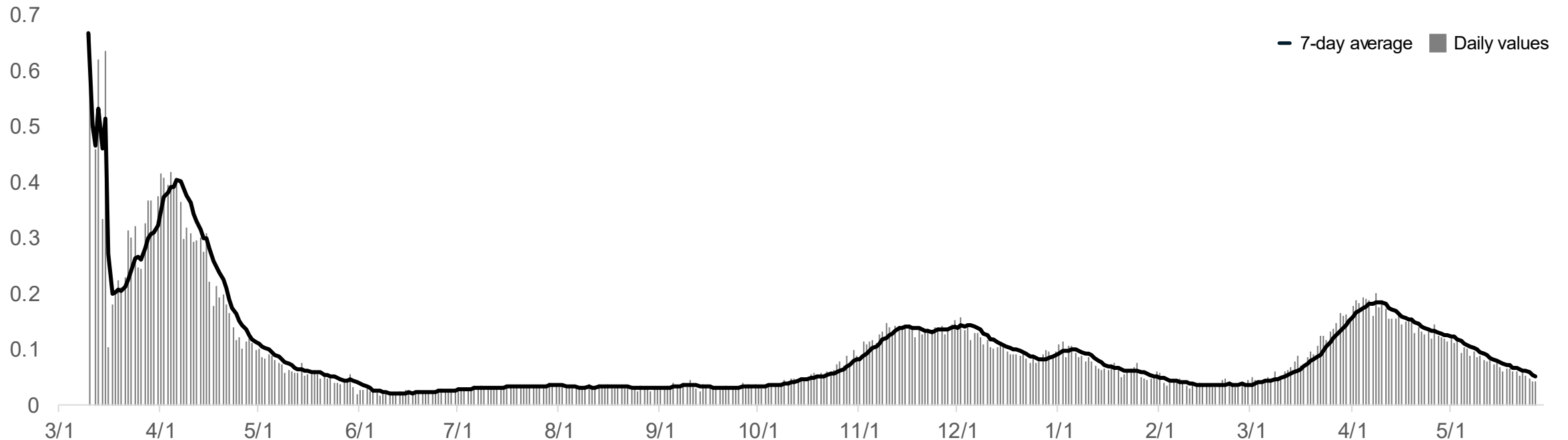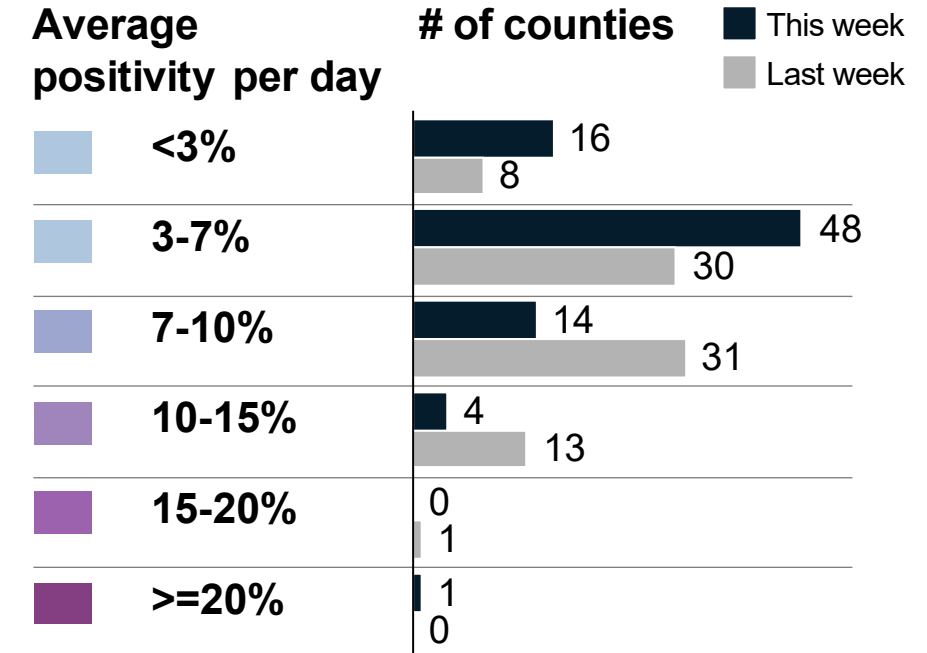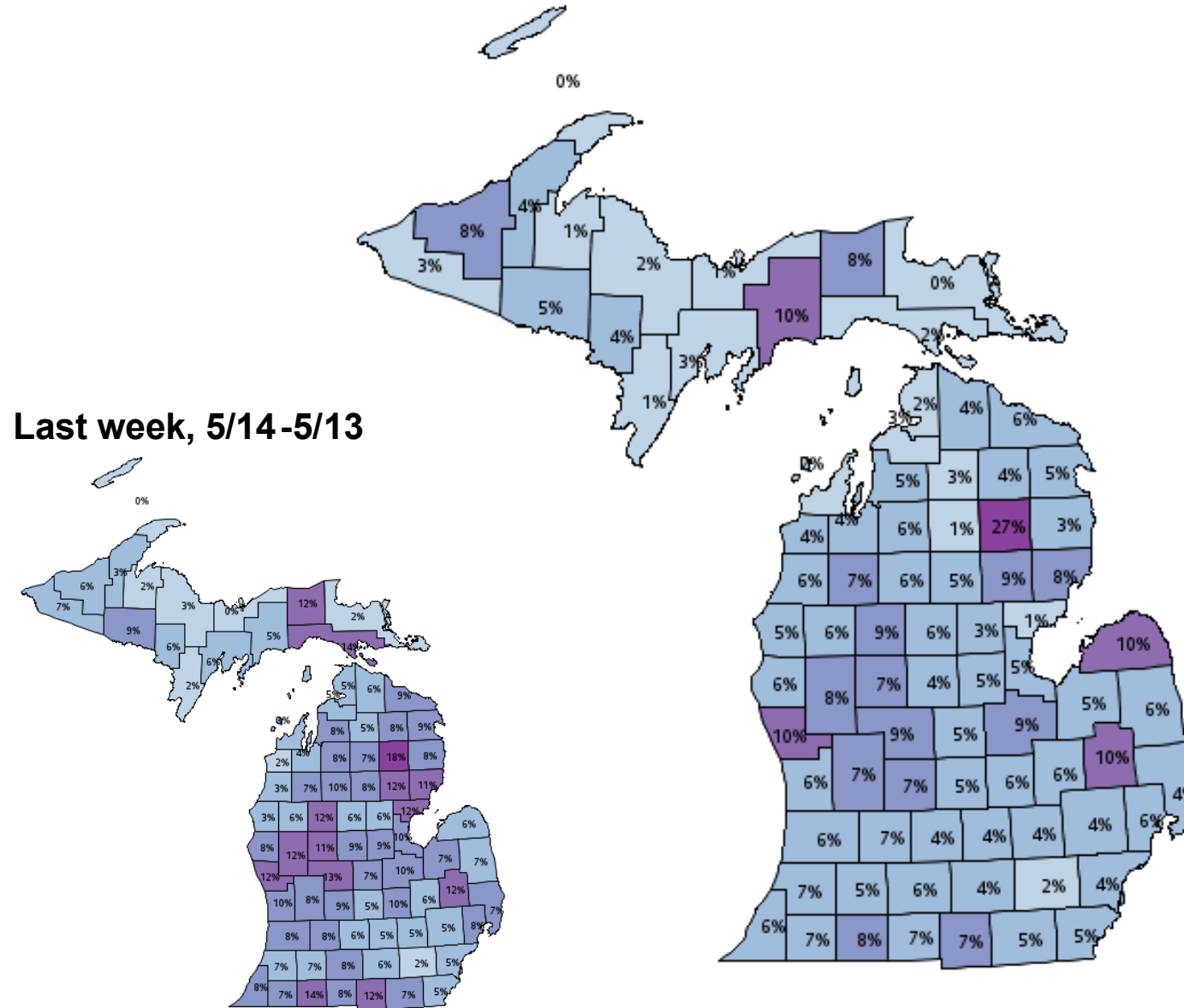
Statewide Positivity Trends

Daily positivity and 7-day rolling average positivity for Michigan

- Early in the pandemic, testing was not as robust as it has been since July 2020 to present

- Positivity is an indicator of whether we are testing enough to identify cases and an early indicator of SARS-CoV-2 transmission (as positivity decreases, we expect case rates to follow)

- **Positivity decreased by 25% between this week and last**

- Note: These are for PCR tests only and exclude tests conducted with Michigan Department of Corrections

Note: Case information sourced from MDHHS and reflects date of onset of symptoms
Source: MDHHS – Michigan Disease Surveillance System

Positivity by county, 5/21-5/27

Last week, 5/14-5/13

Average positivity per day

# of counties

■ This week
■ Last week

| Average positivity per day	This week	Last week
<3%	16	8
3-7%	48	30
7-10%	14	31
10-15%	4	13
15-20%	0	1
>=20%	1	0

Updates since last week:

5 of 83 counties saw double digit positivity in the last week (9 county decrease)

19 of 83 counties saw positivity > 7% in the last week (26 county decrease)

67 of 83 counties saw positivity > 3% in the last week (8 county decrease)

Source: SEOC Testing Results – Excluding MDOC

Age group: average new daily cases

Daily new confirmed and probable cases per million by age group (7-day rolling average)
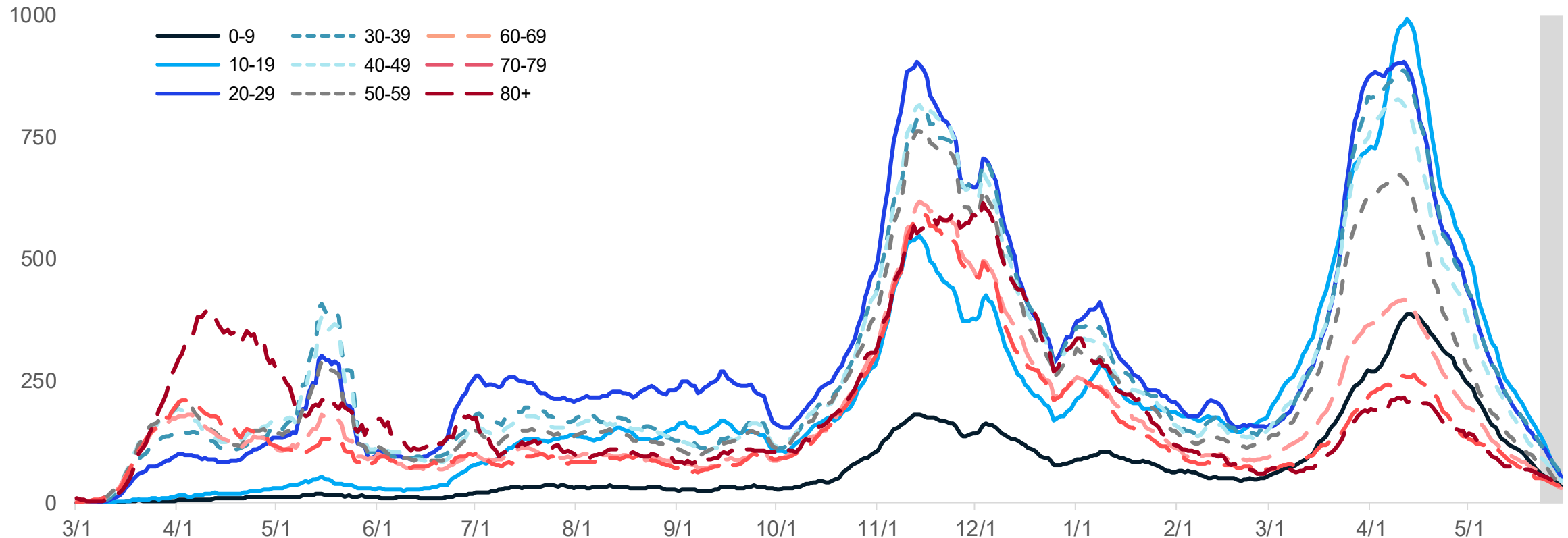
- All age groups by decade are decreasing
- Those aged 10-19 have the highest case rates, followed by 30-39 and 20-29 age groups
- Case rates for age groups between 10 and 49 years are above 70 and below 150 cases per million (Risk Level D)

Note: Case information sourced from MDHHS and reflects date of onset of symptoms
Source: MDHHS – Michigan Disease Surveillance System

Age group: average new daily cases and daily case rate

Daily new confirmed and probable cases per million by age group (7-day rolling average)

| Age Group	Average daily cases	Average Daily Case Rate	One Week % Change (Δ #)	% Change since 4/11/21* (Δ #)
0-9	74.4	64.6	-42% (-55)	-83% (-363)
10-19	181.9	144.9	-36% (-102)	-85% (-1,047)
20-29	174.4	126.4	-34% (-89)	-86% (-1,070)
30-39	154.6	127.4	-34% (-79)	-86% (-921)
40-49	118.9	100.8	-41% (-83)	-88% (-844)
50-59	114.6	84.8	-32% (-54)	-87% (-782)
60-69	82.9	64.9	-28% (-33)	-84% (-449)
70-79	39.3	51.2	-35% (-21)	-80% (-161)
80+	24.9	60.0	-20% (-6)	-72% (-64)
Total¶	974.6	97.3	-35% (-525)	-86% (-5,728)

* Highest 7-day avg. following spring 2021 surge
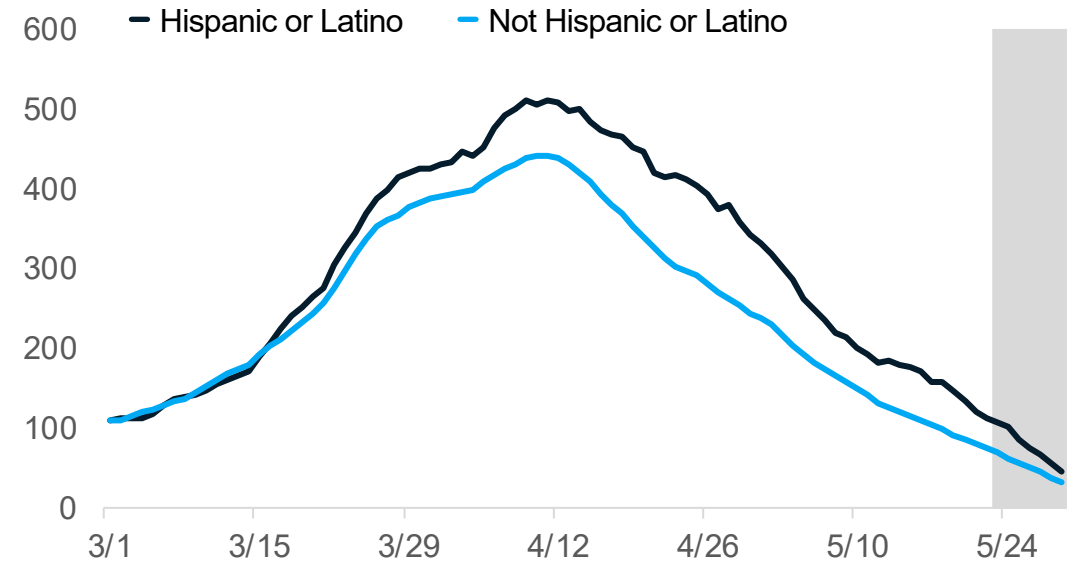¶ Total may not reflect state due to missing age data

- Average daily number of cases (181.9) and avg. daily case rate (144.9 cases/mil) are currently highest for those 10-19
- All age groups between 10 and 59 are experiencing an average of more than 100 cases per day
- Since April 11, case rates have decreased more than 70% for all age groups, with state overall down 86%

Note: Case information sourced from MDHHS and reflects date of onset of symptoms
Source: MDHHS – Michigan Disease Surveillance System

Average daily new cases per million people by race and ethnicity

Daily new confirmed and probable cases per million (7 day rolling average) by race category

- American Indian/Alaska Native
- Black/African American
- Asian/Pacific Islander
- White
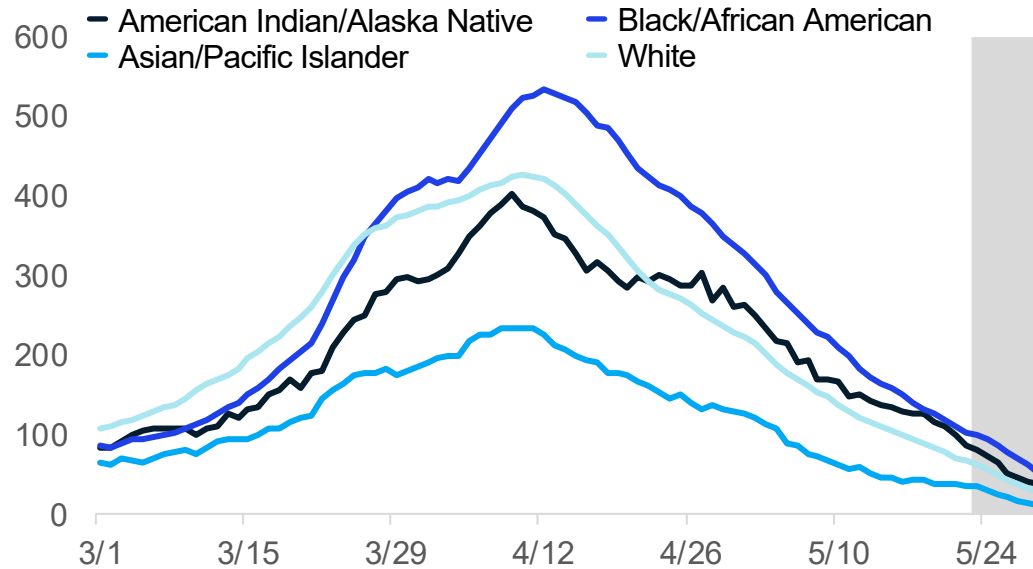
Daily new confirmed and probable cases per million (7 day rolling average) by ethnicity category
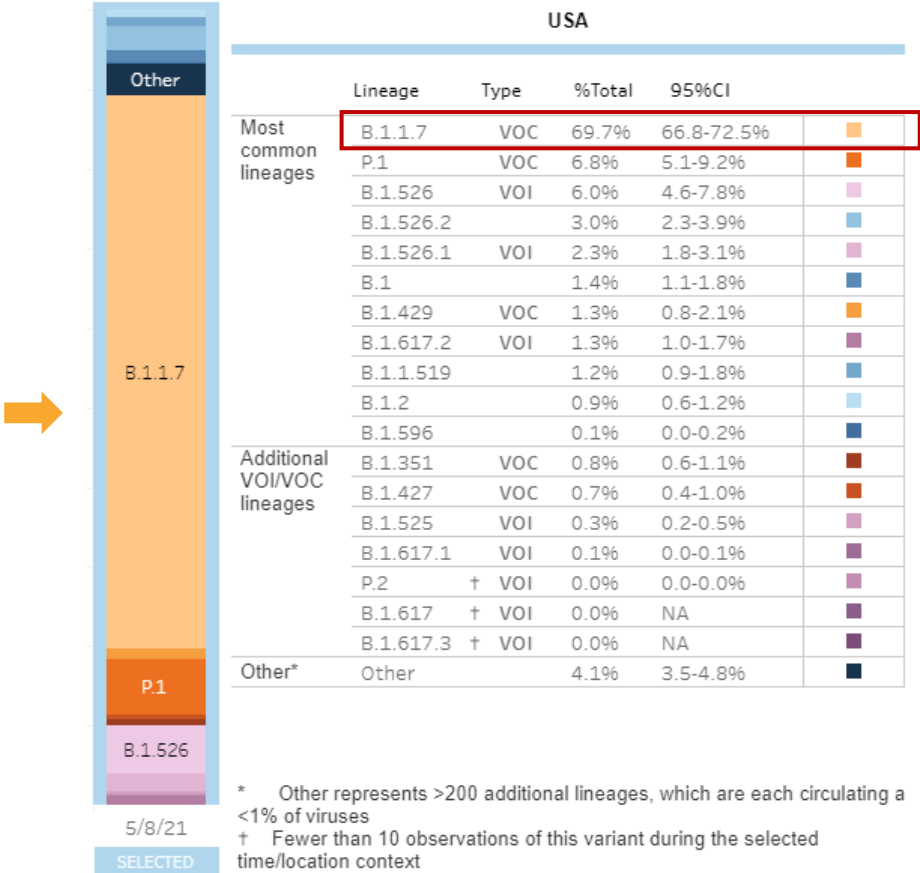
- Hispanic or Latino
- Not Hispanic or Latino

Updates since last week:

- Cases per million are decreasing for all races and ethnicities

- **Blacks, American Indian/Alaskan Natives, and Hispanic/Latinos have the highest case rates**

- In the past 30 days, 25% of all cases represent unknown, multiple, or other races (18% of race is unknown, ↓2%)

- In the past 30 days, 22% of all cases have an unknown ethnicity reported (↓3%)

Note: Case information sourced from MDHHS and reflects date of death of confirmed and probable cases.
Source: MDHHS – Michigan Disease Surveillance System

Identified COVID-19 Cases Caused by All Variants of Concern (VOC) in US and Michigan

SARS-CoV-2 Variants Circulating in the United States, Apr 25 – May 8

USA

	Lineage	Type	%Total	95%CI	
Most common lineages	B.1.1.7	VOC	69.7%	66.8-72.5%	
	P.1	VOC	6.8%	5.1-9.2%	
	B.1.526	VOI	6.0%	4.6-7.8%	
	B.1.526.2		3.0%	2.3-3.9%	
	B.1.526.1	VOI	2.3%	1.8-3.1%	
	B.1		1.4%	1.1-1.8%	
	B.1.429	VOC	1.3%	0.8-2.1%	
	B.1.617.2	VOI	1.3%	1.0-1.7%	
	B.1.1.519		1.2%	0.9-1.8%	
	B.1.2		0.9%	0.6-1.2%	
	B.1.596		0.1%	0.0-0.2%	
Additional VOI/VOC lineages	B.1.351	VOC	0.8%	0.6-1.1%	
	B.1.427	VOC	0.7%	0.4-1.0%	
	B.1.525	VOI	0.3%	0.2-0.5%	
	B.1.617.1	VOI	0.1%	0.0-0.1%	
	P.2	† VOI	0.0%	0.0-0.0%	
	B.1.617	† VOI	0.0%	NA	
	B.1.617.3	† VOI	0.0%	NA	
Other*	Other		4.1%	3.5-4.8%	

* Other represents >200 additional lineages, which are each circulating a <1% of viruses
† Fewer than 10 observations of this variant during the selected time/location context

Variants of Concern in Michigan, Jun 1

600 cases in Wayne attributed to Detroit

Variant	MI Reported Cases¶	# of Counties	CDC est. prevalence
B.1.1.7	11,110*	79	81.2%
B.1.351	67	20	0.4%
B.1.427/B.1.429	299	42	1.1%
P.1	234	28	2.3%

* 533 cases within MDOC; ¶ Numerous cases with county not yet determined

Data last updated June 1, 2021
Source: https://covid.cdc.gov/covid-data-tracker/#variant-proportions and Michigan Disease Surveillance System (MDSS)

Number of outbreak investigations by site type, week ending May 27

● Easier to identify outbreak
● Harder to identify outbreak

Site type **Outbreaks by ongoing/new classification, #**   **Visibility[1]**

■ Ongoing ■ New   Total

Site type	Ongoing	New	Total	Visibility[1]
K-12 SCHOOL	206	11	217	●
SNF/LTC/OTHER ASSISTED LIVING	124	11	135	●
MANUFACTURING, CONSTRUCTION	129	6	135	●
*RETAIL	34	1	35	●
*RESTAURANTS AND BARS	24	2	26	●
CHILDCARE/YOUTH PROGRAM	22	4	26	●
HEALTHCARE	17	3	20	●
OFFICE SETTING	15	2	17	●
COLLEGE/UNIVERSITY	16	0	16	●
OTHER	9	4	13	●
*SOCIAL GATHERING	12	1	13	●
CORRECTIONS	11	1	12	●
AGRICULTURAL/FOOD PROCESSING	12	0	12	●
*SHELTERS	5	1	6	●
*RELIGIOUS SERVICES	3	1	4	●
*PERSONAL SERVICES	3	1	4	●
*COMMUNITY EXPOSURE - INDOOR	0	1	1	●
*COMMUNITY EXPOSURE - OUTDOOR	0	0	0	●
TOTAL	642	50	692	

Total number of active outbreaks is down from previous week

Following K-12 (11), the greatest number of new outbreaks were reported in SNF/LTC (11), and manufacturing/construction (6)

LHDs reported new outbreaks in all settings except in College and Universities, Agriculture and Food Processing, and Outdoor Community Exposures.

1. Based on a setting's level of control and the extent of time patrons/residents spend in the particular setting, different settings have differing levels of ability to ascertain whether a case derived from that setting

NOTE: Many factors, including the lack of ability to conduct effective contact tracing in certain settings, may result in significant underreporting of outbreaks. This chart does not provide a complete picture of outbreaks in Michigan and the absence of identified outbreaks in a particular setting in no way provides evidence that, in fact, that setting is not having outbreaks.
Source: LHD Weekly Sitreps

K-12 school outbreaks, recent and ongoing, week ending May 27

Number of reported outbreaks decreased since last week (275 to 217) including decreases in High Schools (111 to 96), Middle/Jr High (66 to 54), and Pre K-Elementary (96 to 64). Only Administrative saw a slight increase (2 to 3).

Region	Number of reported cases,#	Number of outbreaks	Range of cases per outbreak
Region 1	269 / 6	33	2-40
Region 2n	123 / 10	45	2-10
Region 2s	36 / 2	9	2-8
Region 3	470 / 3	54	2-61
Region 5	114 / 2	13	2-43
Region 6	339 / 2	34	2-48
Region 7	117 / 0	21	2-33
Region 8	68 / 0	8	2-21
Total	1,536 / 25	**217**	**2-61**

Legend: # Ongoing - Excluding New, # New

Grade level	Number of reported cases,#	Number of outbreaks	Range of cases per outbreak
Pre-school - elem.	296 / 13	64	2-23
Jr. high/middle school	300 / 4	54	2-35
High school	930 / 8	96	2-61
Administrative	10 / 0	3	2-6
Total	1,536 / 25	**217**	**2-61**

Legend: # Ongoing - Excluding New, # New

Many factors, including the lack of ability to conduct effective contact tracing in certain settings, may result in significant underreporting of outbreaks. This chart does not provide a complete picture of outbreaks in Michigan and the absence of identified outbreaks in a particular setting in no way provides evidence that, in fact, that setting is not having outbreaks.
Source: LHD Weekly Sitreps

COVID-19 K-12 Sports Related Clusters and Cases

Cumulative Since Jan 2021 through May 2021

491 cases	368 cases	283 cases	108 cases	89 cases	55 cases	52 cases	41 cases
125 clusters	61 clusters	73 clusters	23 clusters	44 clusters	16 clusters	19 clusters	11 clusters
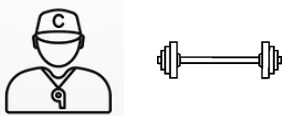
44 cases	41 cases	32 cases	22 cases	14 cases	38 cases
4 clusters	18 clusters	13 clusters	12 clusters	3 clusters	23 clusters

- Cases identified by local public health which include school-affiliated and club/travel/regional sports (spectators, collegiate, and professional sports as well as secondary cases to collegiate/professional sports are excluded)

- Largest number of new cases and clusters identified in past week are general athletics, baseball/softball, and track and field

- Cases and clusters have occurred in 25 different sport settings (new this week: ice skating)

COVID-19 and Healthcare Capacity and COVID Severity

Hospitalizations and ICU utilization are decreasing

- COVID-like illness (CLI) has fallen to 1.8% (vs. 2.8% last week)
- Hospital admissions are decreasing statewide and for all age groups
- Hospitalizations down 28% since last week (vs. 21% decline week prior)
- All regions are showing decline in hospitalization trends this week
- Volume of COVID-19 patients in intensive care has decreased 20% since last week (vs. 17% decline week prior)

Death rate has decreased to 3.6 daily deaths per million people

- 32% decrease since last week (vs. 28% decrease last week)
- 53% decrease since April 24 peak
- Proportion of deaths among those under 60 years of age is steady from the previous week

Michigan Trends in Emergency Department Visits for COVID-19-Like Illness (CLI)

Percentage of ED visits with Diagnosed COVID-19 in Michigan

Average Hospital Admissions by Age

Confirmed COVID-19 Hospital Admissions by Age Group - Statewide Rolling Weekly Average

Legend: Peds | 18 - 19 | 20 - 29 | 30 - 39 | 40 - 49 | 50 - 59 | 60 - 69 | 70 - 79 | 80+ | Age Unkn

- Currently, there are approximately 134 daily hospital admissions for COVID-19

- Over the past week, those 60-69 have seen the highest avg. daily hospital admissions (25 admissions)

- Since the Apr 14 high, overall avg. daily hospital admissions for COVID-19 have decrease 78%

Source: CHECC & EM Resource

Average Hospital Admissions by Age

Confirmed COVID-19 Hospital Admissions by Age Group - Statewide Rolling Weekly Average

Age Group	Daily Avg Admissions	Average Daily Adm. Rate†	One Week % Change (#)	% Change since 4/14* (#)
Peds	4.7	**2.2**	-23% (-1-5)	-37% (-1-5)
18-19	1-5	6.0	-27% (-1-5)	-68% (-1-5)
20-29	11.7	8.5	-10% (-1-5)	-65% (-22)
30-39	11.7	9.7	-13% (-1-5)	-76% (-37)
40-49	12.9	10.9	-34% (-7)	-83% (-65)
50-59	22.0	16.3	-13% (-1-5)	-81% (-92)
60-69	24.9	19.5	-33% (-12)	-81% (-103)
70-79	21.1	27.6	-24% (-7)	-75% (-64)
80+	17.7	42.8	-17% (-1-5)	-71% (-43)
Total¶	133.9	13.4	-23% (-41)	-78% (-467)

† Rate per 1,000,000 MI residents
* Highest 7-day avg. hosp. adm. following Spring 2021 surge
¶ Total may not reflect state due to missing age data

- Currently, there are approximately 134 daily hospital admissions for COVID-19

- Over the past week, those 60-69 have seen the highest avg. daily hospital admissions (25 admissions)

- Since the Apr 14 high, overall avg. daily hospital admissions for COVID-19 have decrease 78%

Note: Case information sourced from MDHHS and reflects date of onset of symptoms
Source: MDHHS – Michigan Disease Surveillance System

Statewide Hospitalization Trends: Total COVID+ Census

Hospitalization Trends 10/1/2020 – 5/31/2021
Confirmed Positive & Persons Under Investigation (PUI)
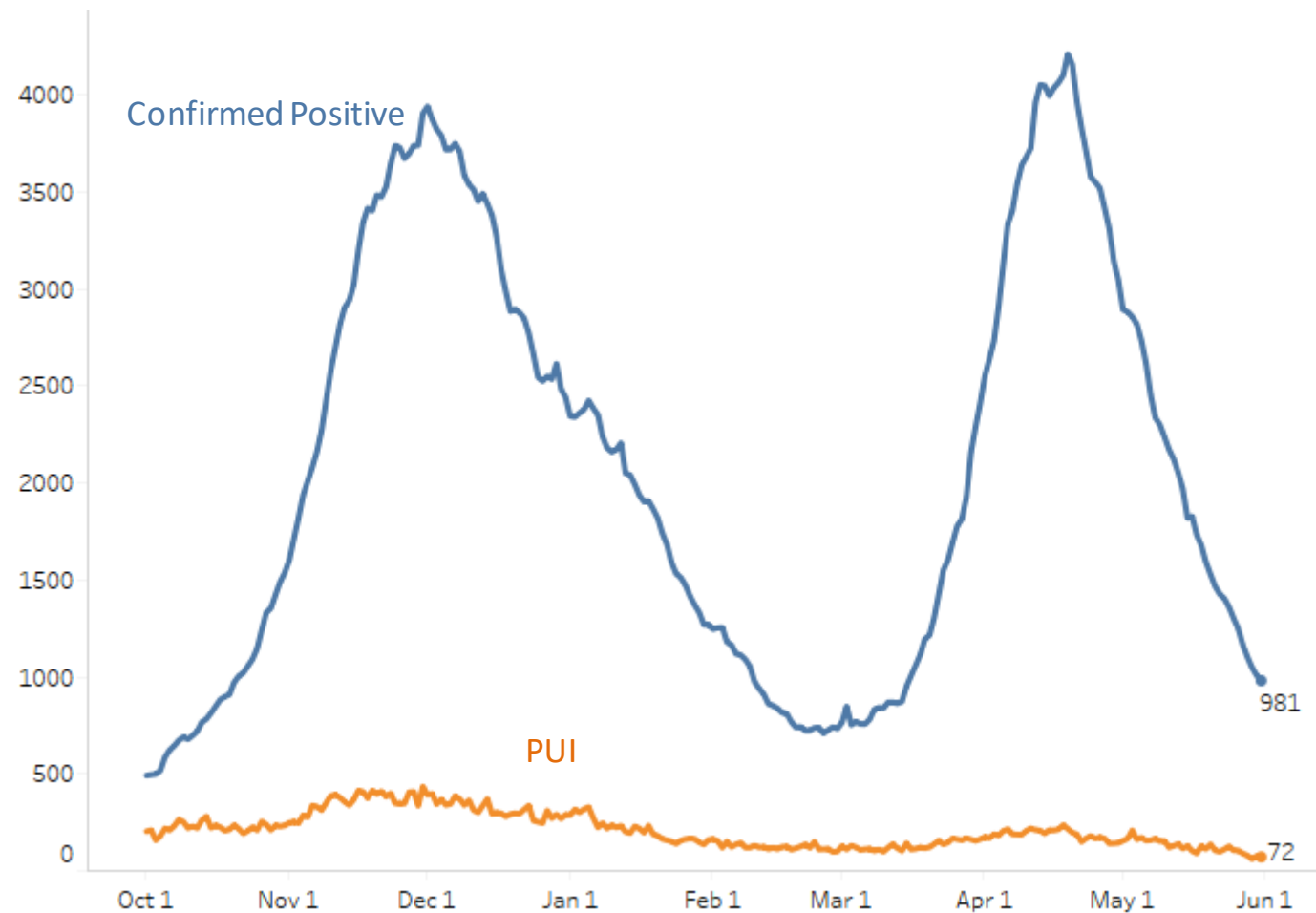
COVID+ census in hospitals continues to decline from the April 19th peak. This week is down 28% from the previous week (previous week was down 21%).

Confirmed Positive

PUI

981

72

Hospitalized COVID Positive Long Term Trend (beginning March 2020)

4,365   3,941   4,211

304   709   981
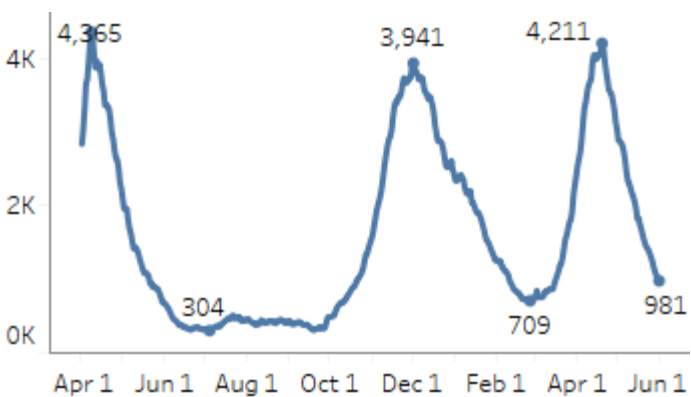
Statewide Hospitalization Trends: Regional COVID+ Census

Hospitalization Trends 10/1/2020 – 5/31/2021
Confirmed Positive by Region
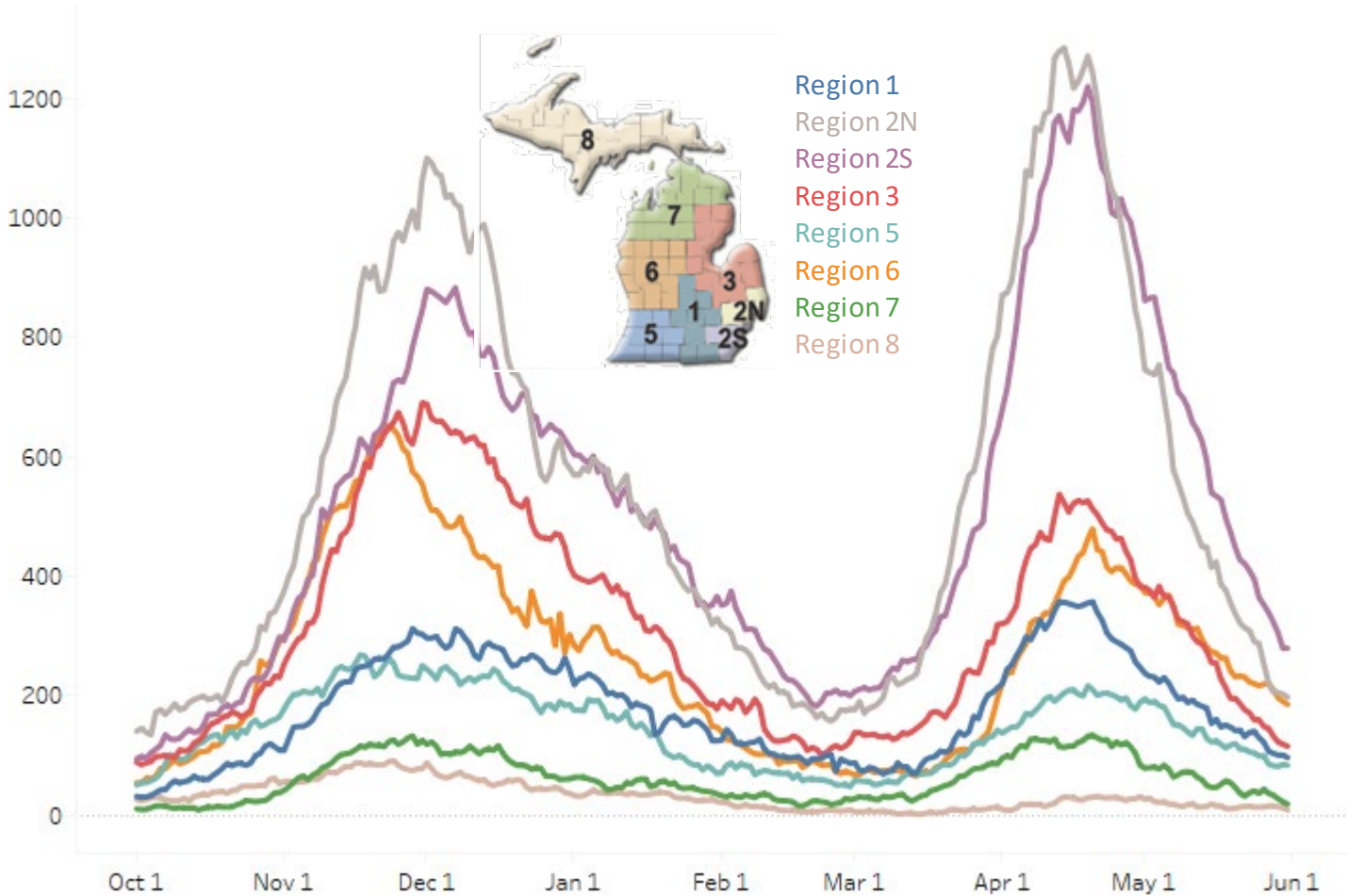
All regions show decreasing hospitalization trends this week.

All regions are now below 150/M hospitalized, with only 3 regions (Regions 2S, 3 and 6) above 100/M hospitalized.

Region	COVID+ Hospitalizations (% Δ from last week)	COVID+ Hospitalizations / MM
Region 1	96 (-31%)	89/M
Region 2N	197 (-32%)	89/M
Region 2S	279 (-29%)	125/M
Region 3	115 (-28%)	101/M
Region 5	83 (-20%)	87/M
Region 6	185 (-16%)	126/M
Region 7	18 (-55%)	36/M
Region 8	8 (-38%)	26/M

Statewide Hospitalization Trends: ICU COVID+ Census

Hospitalization Trends 8/1/2020 – 5/31/2021
### Confirmed Positive in ICUs
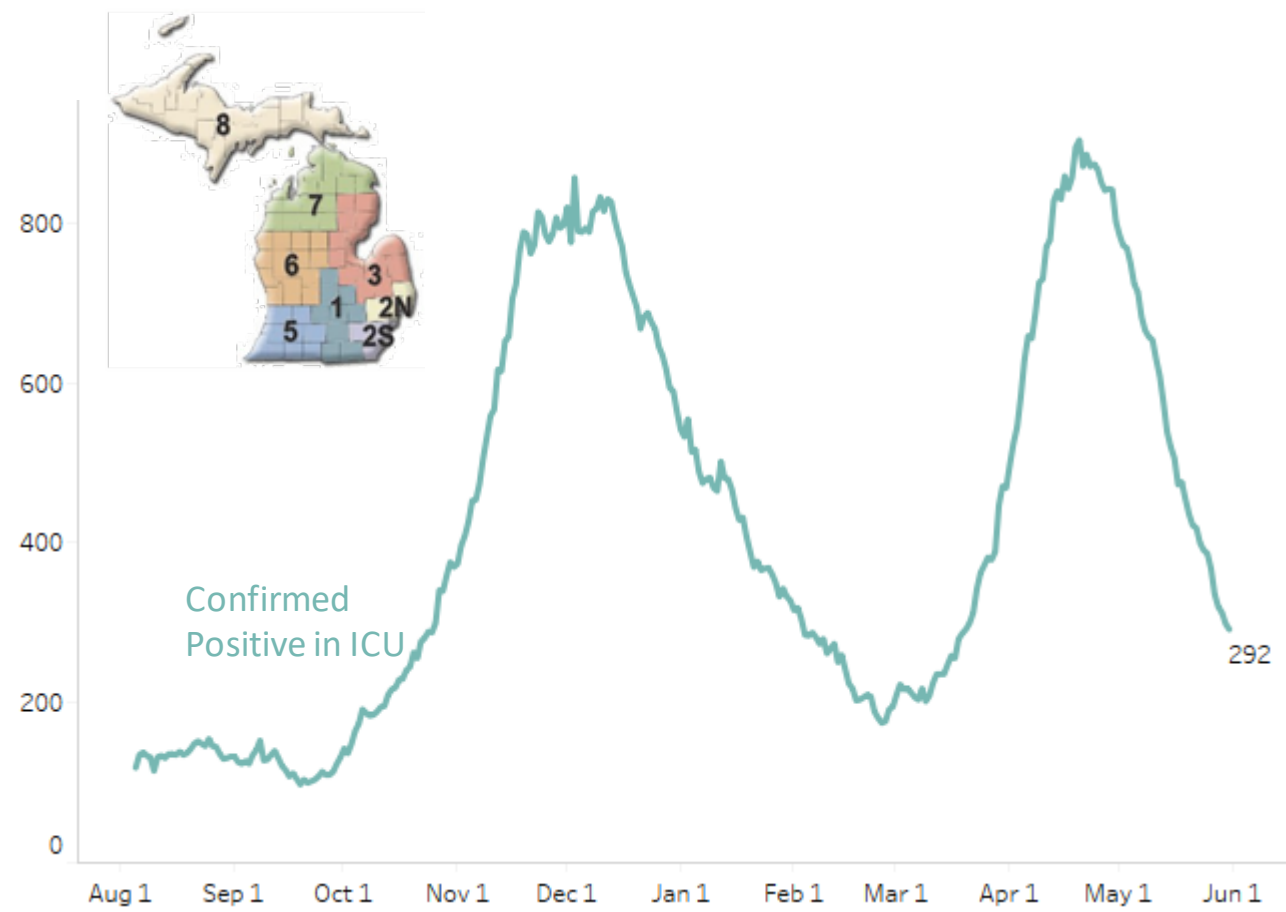
Overall, volume of COVID+ patients in ICUs has decreased 25% from last week, with all regions showing decreasing ICU census.

Only one region (Region 6) has greater than 20% of ICU beds occupied by COVID+ patients.

| Region	Adult COVID+ in ICU (% Δ from last week)	Adult ICU Occupancy	% of Adult ICU beds COVID+
Region 1	27 (-31%)	87%	14%
Region 2N	54 (-19%)	74%	9%
Region 2S	89 (-29%)	82%	12%
Region 3	32 (-32%)	86%	9%
Region 5	24 (-23%)	68%	13%
Region 6	55 (-11%)	83%	21%
Region 7	7 (-36%)	70%	4%
Region 8	4 (-50%)	59%	7%

Average and total new deaths, by age group

Daily confirmed and probable deaths per million by age group (7 day rolling average)

Legend:
- 0-19
- 20-29
- 30-39
- 40-49
- 50-59
- 60-69
- 70-79
- 80+
- Total
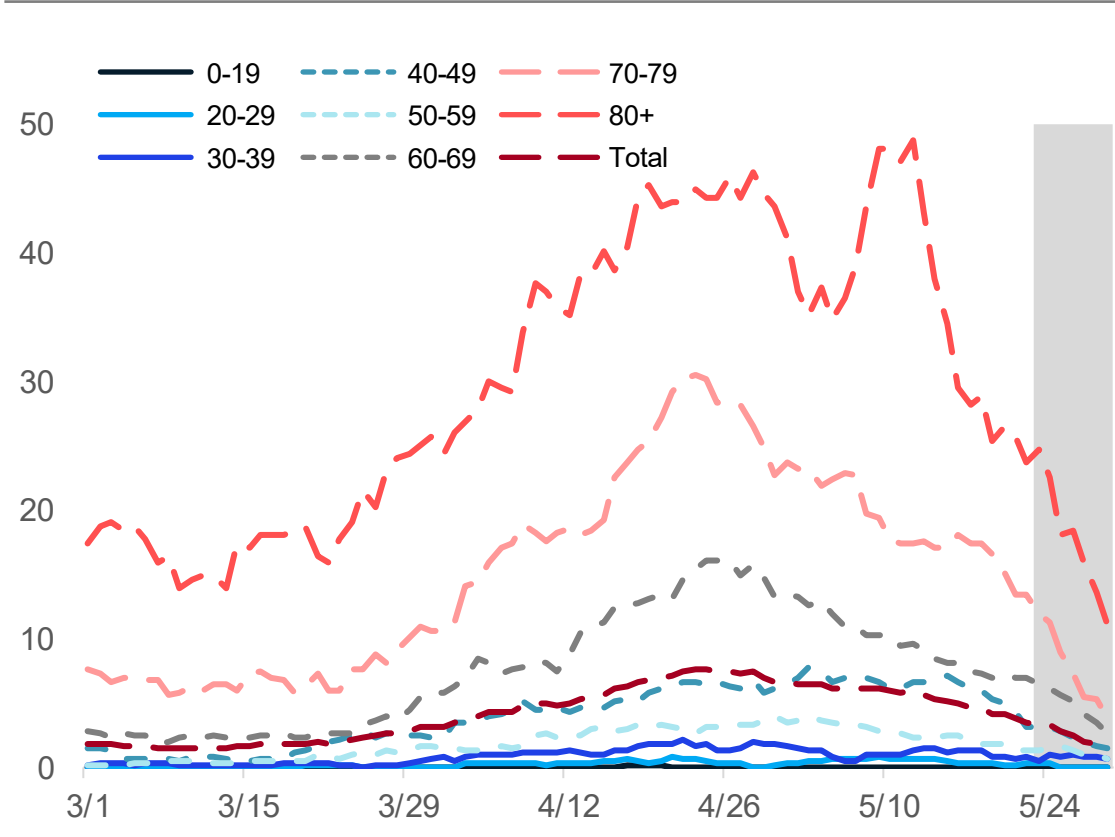
Total confirmed and probable deaths by age group (past 30 days, ending 5/22/2021)

- 24% of deaths below age sixty
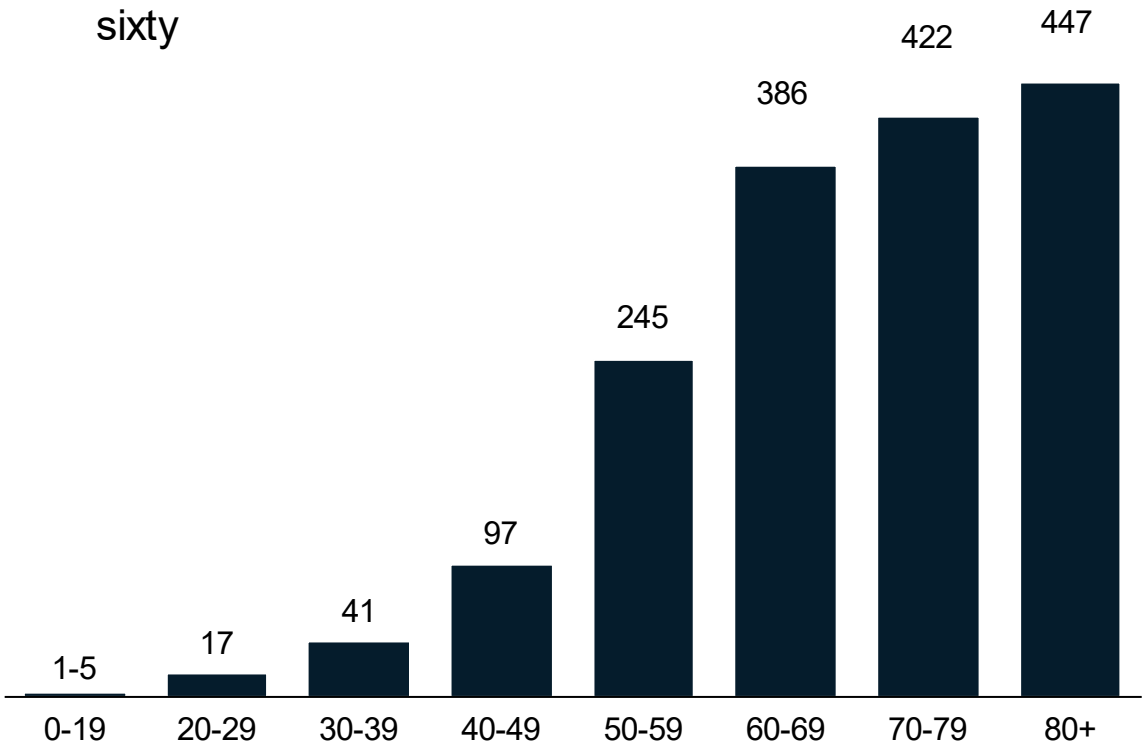
Age group	Deaths
0-19	1-5
20-29	17
30-39	41
40-49	97
50-59	245
60-69	386
70-79	422
80+	447

Note: Death information sourced from MDHHS and reflects date of death of confirmed and probable cases.
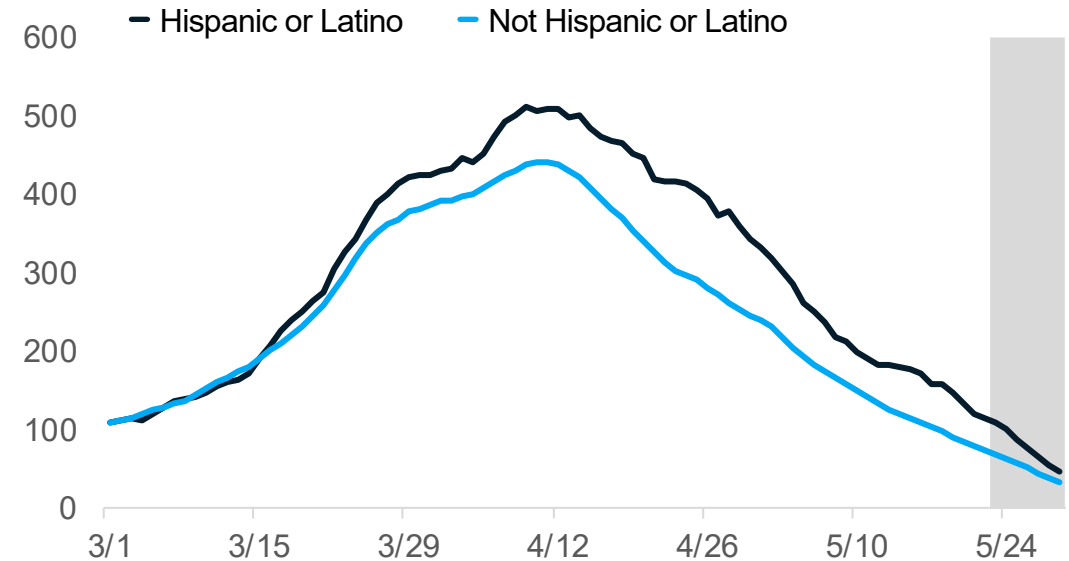
Source: MDHHS – Michigan Disease Surveillance System

30-day rolling average daily deaths per million people by race and ethnicity

Average daily deaths per million people by race

Legend: American Indian/Alaska Native — Black/African American — Asian/Pacific Islander — White
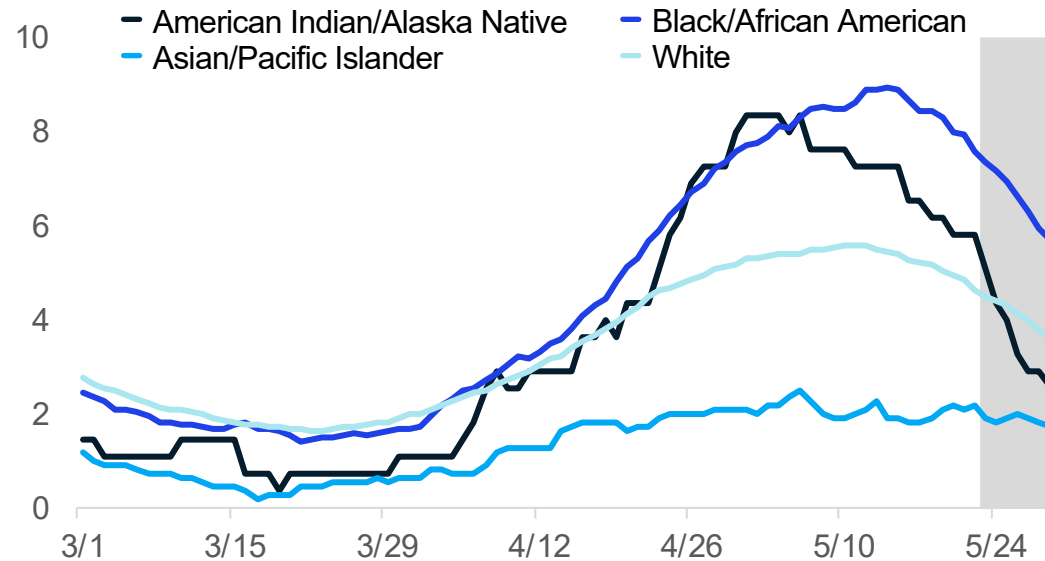
Average daily deaths per million people by ethnicity

Legend: Hispanic or Latino — Not Hispanic or Latino

Updates since last week:

- Deaths are a lagging indicator of cases
- All racial and ethnic groups are seeing a decrease or plateau in COVID deaths
- **American Indian/Alaskan Natives, Blacks and Non-Hispanics/Latinos have the most reported deaths per capita**
- Deaths are not adjusted for confounders (e.g., age, sex, comorbidities)

Note: Death information sourced from MDHHS and reflects date of death of confirmed and probable cases.
Source: MDHHS – Michigan Disease Surveillance System

How is public health capacity?

Diagnostic testing volume (PCR and antigen) has decreased from last week

- PCR testing decreased since last week
- Percent of antigen tests is about the same since last week

Cases identified for investigations has declined
- Number of cases not investigated this week (1,915) is 48% lower than prior week (3,676)
  - As cases have decreased, the percent of interviews attempted has improved
- Consistent low proportion of cases interviewed with a source of known infection (indicating community acquisition)
- Consistent low proportion of those quarantining when their symptoms begin (indicating no effective halt in community transmission)

Daily diagnostic tests, by message date

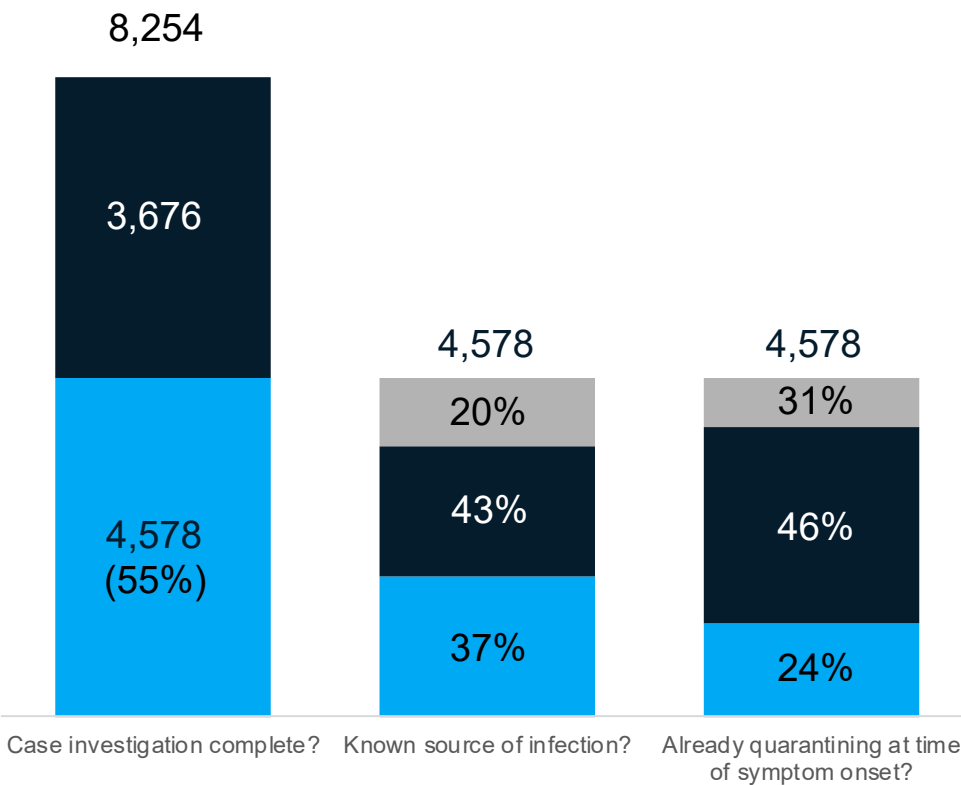### Last 90 Days Tests By Test Type and Message Date
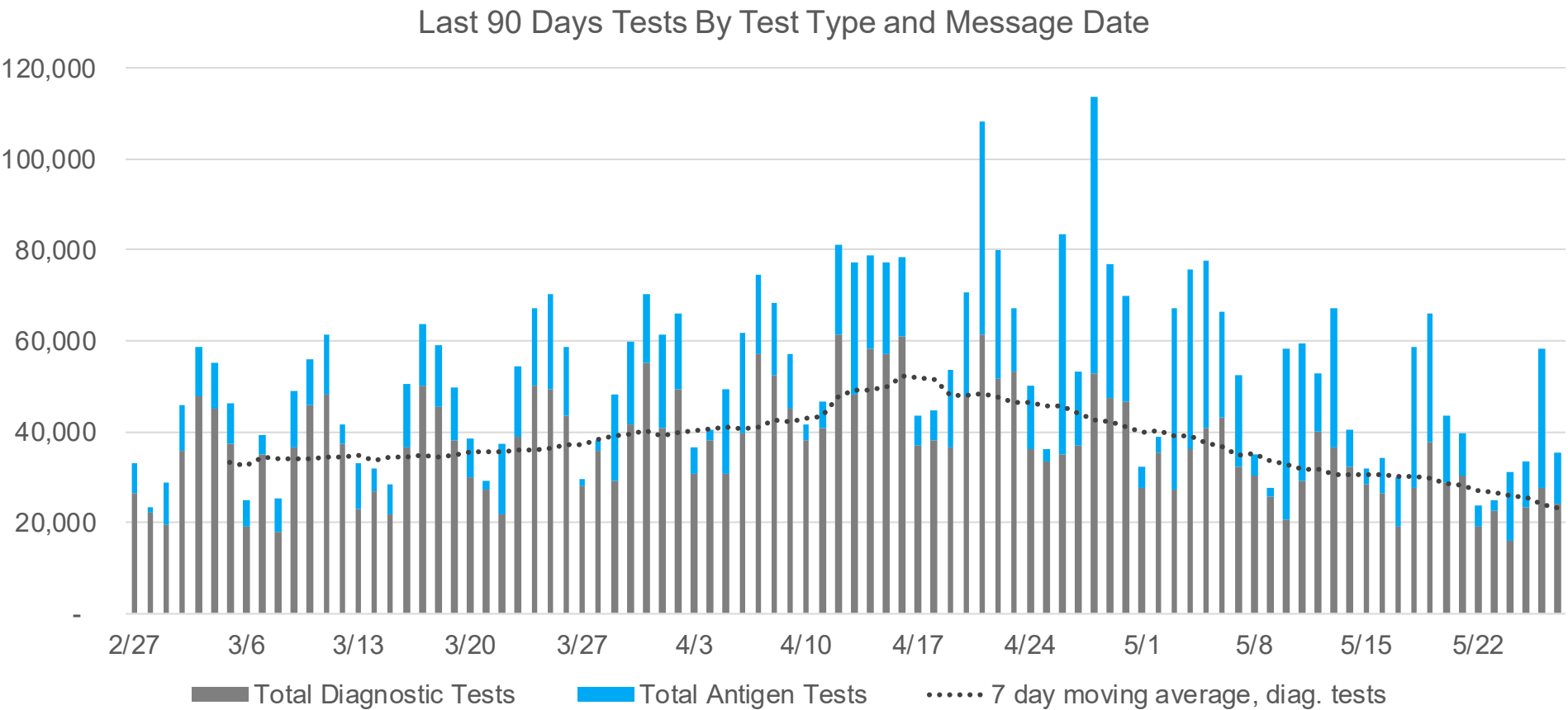
Weekly Update

- 35,202 rolling 7-day average daily diagnostic tests reported to MDHHS (PCR + Ag) (↓)

- 23,228 average daily PCR tests (↓)

- 34.0% are antigen tests over the past week (↔)

- 5.1% positivity in PCR tests (↓)

Legend: ■ Total Diagnostic Tests ■ Total Antigen Tests ⋯⋯ 7 day moving average, diag. tests

Source: MDSS/Michigan Medical Advantage Group, MDHHS, testing labs

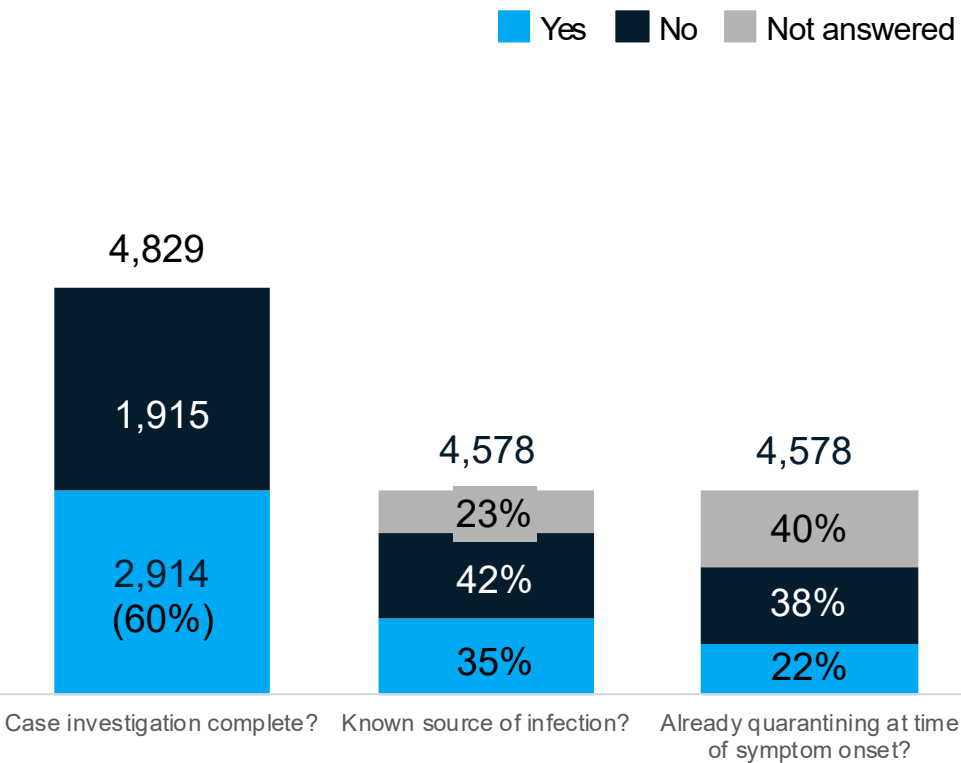# New Case Investigation Metrics (Statewide)

New Communicable Disease metrics this week:
- The percent (60%, ↑5%) of completed interviews improved from prior week
- Fewer cases identified for investigations (4,829, ↓3,425) have improved from prior week
- 35% of investigated cases having a known source (37% last week, 38% week prior)
- 22% of investigated cases noted that they were quarantining before symptoms (24% last week)

05/15-05/21 Case report form information

05/22-05/28 Case report form information

Legend: Yes (blue), No (dark navy), Not answered (gray)

05/15-05/21:
- Case investigation complete? Total 8,254 — Yes 4,578 (55%), No 3,676
- Known source of infection? Total 4,578 — Yes 37%, No 43%, Not answered 20%
- Already quarantining at time of symptom onset? Total 4,578 — Yes 24%, No 46%, Not answered 31%

05/22-05/28:
- Case investigation complete? Total 4,829 — Yes 2,914 (60%), No 1,915
- Known source of infection? Total 4,578 — Yes 35%, No 42%, Not answered 23%
- Already quarantining at time of symptom onset? Total 4,578 — Yes 22%, No 38%, Not answered 40%

COVID-19 Vaccination

Administration

9th state in doses delivered, first doses provided and number of completed individuals (5/31/21)

78.0% adjusted administration ratio (excluding federal entities, [CDC channel portfolio](#) 5/23/2021 – no CDC update)

Weekly doses administered below 400,000 a week for three weeks

First doses in May most frequently given by pharmacies, local health departments, and hospitals

Coverage

4,203,466 people in Michigan have completed series

70.2% of people aged 50 or older have had first dose; 40.6% of people aged 12-49 (up from 39.3% last week)

Initiation highest among Asian, Native Hawaiian or Pacific Islander and American Indian/Alaskan Native individuals (MI Covid Vaccine Dashboard 6/1/21)

Less than 1% of Vaccinated Individuals Later Tested Positive for COVID-19 (Number of cases who are fully vaccinated (n= 6,187))

Doses Delivered and Administered, and Coverage as of 6/1/21

COVID Vaccine Doses Administered by Date / Week Ending Date (K = Thousand, M = Million)
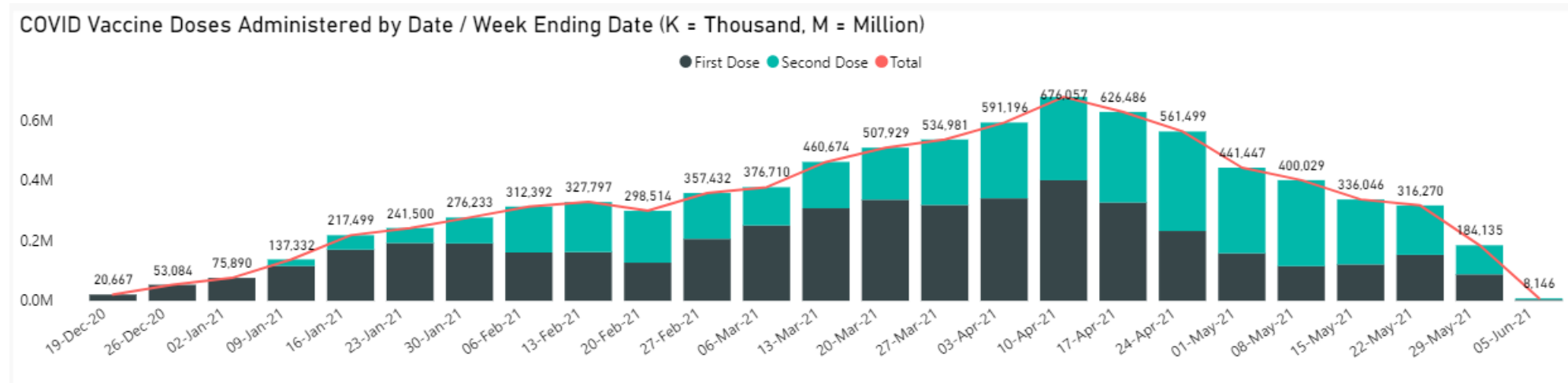
11,229,100 doses delivered to providers in Michigan
8,687,297 doses Administered (CDC tracker) – MI has detail on 8,339,945 (96%)

78.0% adjusted administration ratio (excluding federal entities, CDC channel portfolio 5/25/2021) – same as last week
- Last three weeks less than 400,000 doses administered in a week
- 184,135 doses administered last week (down from 308,495)

During the month of May, first doses were most frequently given by pharmacies (311,643), local health departments (77,756), and hospitals (44,080), followed by FQHCs, Family Practices, Pediatrics and Urgent Cares (13K or fewer each).

Coverage Demographics as of 6/1/2021

**4,203,466 people** completed series (CDC) (195K+ people)

Age Group (Michigan dashboard)

- 40.6% people age 12-49 initiated vaccination (up from 39.3% last week)
- 70.2% people aged 50 or older have initiated their vaccine series; 64.6% have completed

Race/Ethnicity for 12 and older

- Initiation coverage highest among those of Asian, Native Hawaiian or Pacific Islander Race (47.1%) then NH (Non-Hispanic) American Indian (42.8%), NH White (41.4%), NH Black or African American (28.7%) Races.

- Initiation is at 34.7% for those of Hispanic ethnicity

- 23.2% data missing or unknown

Coverage by Age Group
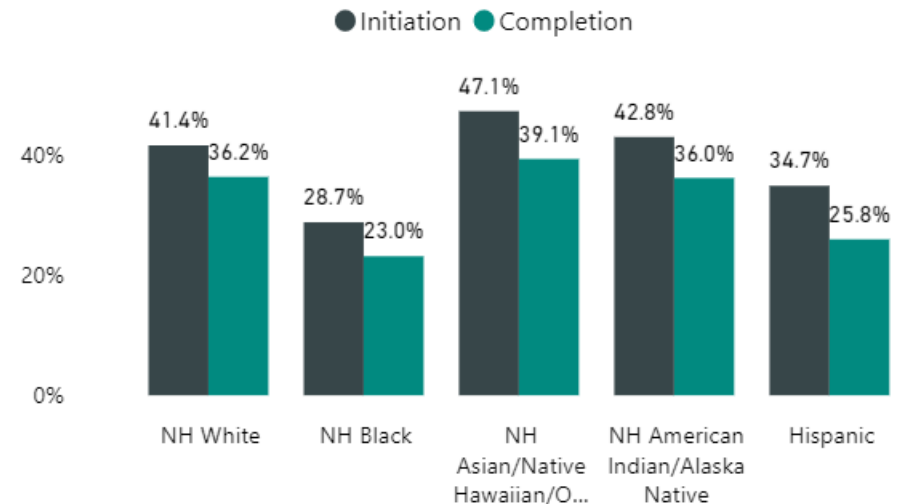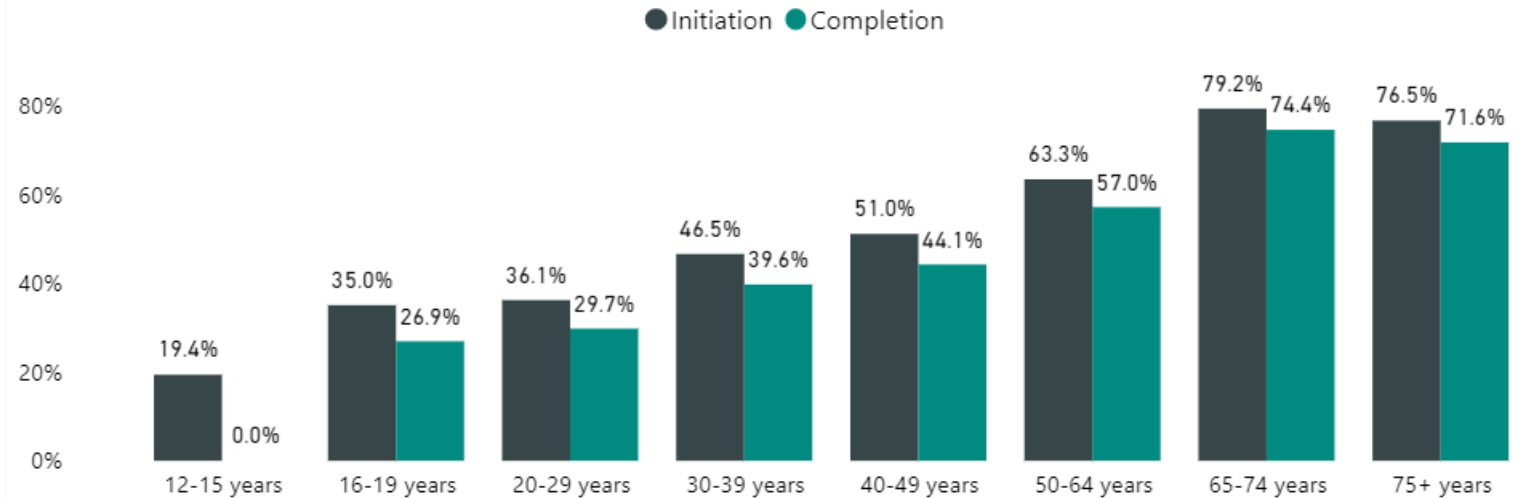
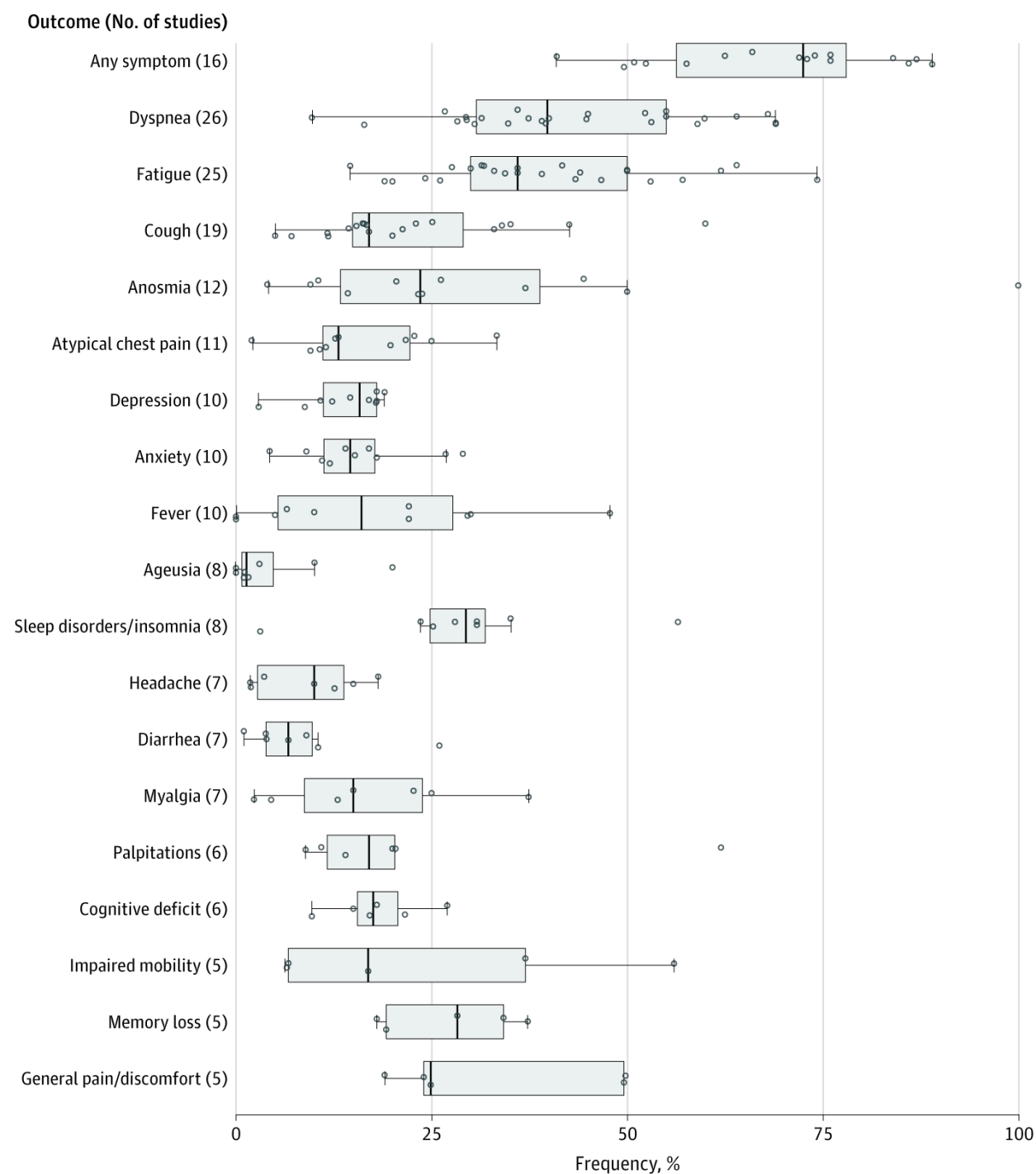# Potential COVID-19 Vaccination Breakthrough Cases

Michigan part of CDC's nationwide investigation ([COVID-19 Breakthrough Case Investigations and Reporting | CDC](#))

Michigan Data (1/1/21 through 5/25/21):

- 6,467 cases met criteria based on a positive test 14 or more days after being fully vaccinated

- Less than 1% of people who were fully vaccinated met this case definition
    - Includes 123 deaths (116 persons age 65 years or older)
    - 332 cases were hospitalized

- Vaccine breakthrough cases are expected. COVID-19 vaccines are effective and are a critical tool to bring the pandemic under control. However, no vaccines are 100% effective at preventing illness in vaccinated people. There will be a small percentage of fully vaccinated people who still get sick, are hospitalized, or die from COVID-19.

- There is some evidence that vaccination may make illness less severe for those who are vaccinated and still get sick.

- To date, no unexpected patterns have been identified in the case demographics or vaccine characteristics among people with reported vaccine breakthrough infections.

New Data on Persistent COVID-19 ("Long COVID")

- Review of 45 studies including 9,751 people with COVID-19.

- Measured symptoms >60 days after start of infection.

- 73% of people had persistent illness.

- Most frequent long symptoms were **shortness of breath**, **fatigue**, and **sleep disorders**.

Nasserie T, et al. JAMA Network Open. 2021;4(5):e2111417

Outcome (No. of studies)

Any symptom (16)
Dyspnea (26)
Fatigue (25)
Cough (19)
Anosmia (12)
Atypical chest pain (11)
Depression (10)
Anxiety (10)
Fever (10)
Ageusia (8)
Sleep disorders/insomnia (8)
Headache (7)
Diarrhea (7)
Myalgia (7)
Palpitations (6)
Cognitive deficit (6)
Impaired mobility (5)
Memory loss (5)
General pain/discomfort (5)

Frequency, %

WHO naming of SARS-CoV-2 variants

- To assist with public discussions of variants, WHO convened a group of subject matter experts to consider easy-to-pronounce and non-stigmatizing labels for Variants of Interest (VOI) and variants of concern (VOC)
- Nomenclature for scientists and scientific research will remain the same (e.g., B.1.1.7, B.1.351, P.1, B.1.427, etc.)

Variants of Concern

WHO label	Pango lineage	GISAID clade/lineage	Nextstrain clade	Earliest documented samples	Date of designation
Alpha	B.1.1.7	GRY (formerly GR/501Y.V1)	20I/S:501Y.V1	United Kingdom, Sep-2020	18-Dec-2020
Beta	B.1.351	GH/501Y.V2	20H/S:501Y.V2	South Africa, May-2020	18-Dec-2020
Gamma	P.1	GR/501Y.V3	20J/S:501Y.V3	Brazil, Nov-2020	11-Jan-2021
Delta	B.1.617.2	G/452R.V3	21A/S:478K	India, Oct-2020	VOI: 4-Apr-2021 VOC: 11-May-2021

Variant of Interest

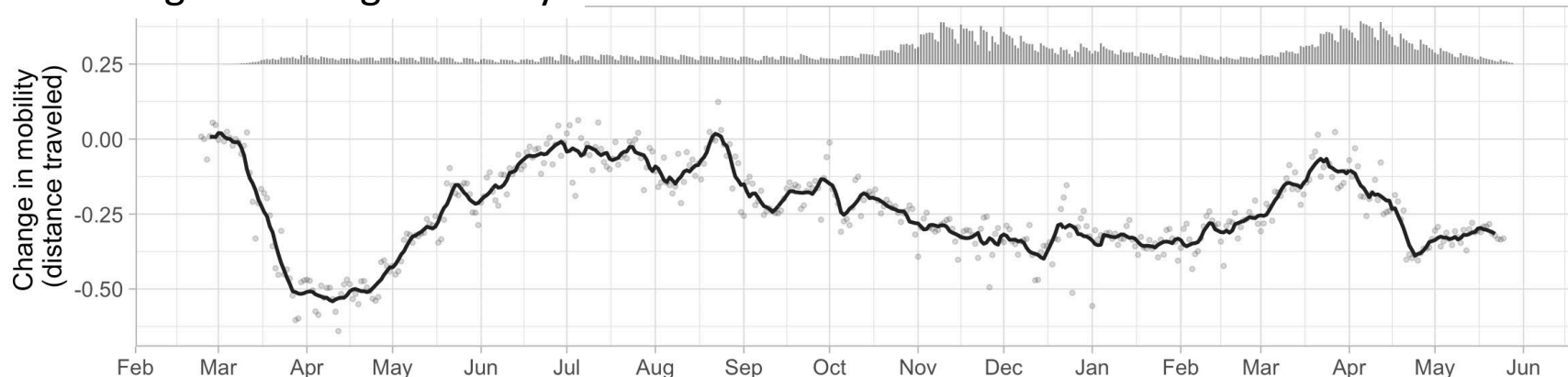| WHO label	Pango lineage	GISAID clade/lineage	Nextstrain clade	Earliest documented samples	Date of designation
Epsilon	B.1.427/B.1.429	GH/452R.V1	20C/S.452R	United States of America, Mar-2020	5-Mar-2021
Zeta	P.2	GR	20B/S.484K	Brazil, Apr-2020	17-Mar-2021
Eta	B.1.525	G/484K.V3	20A/S484K	Multiple countries, Dec-2020	17-Mar-2021
Theta	P.3	GR	20B/S:265C	Philippines, Jan-2021	24-Mar-2021
Iota	B.1.526	GH	20C/S:484K	United States of America, Nov-2020	24-Mar-2021
Kappa	B.1.617.1	G/452R.V3	21A/S:154K	India, Oct-2020	4-Apr-2021

Unacast mobility patterns in MI

- All metrics recently decreased preceding case decreases
- Most recent data appears to be more plateaued at levels similar to winter
- Cases shown as bars at top of each chart
- Data through 5/25/21 (data as of 5/29/21)

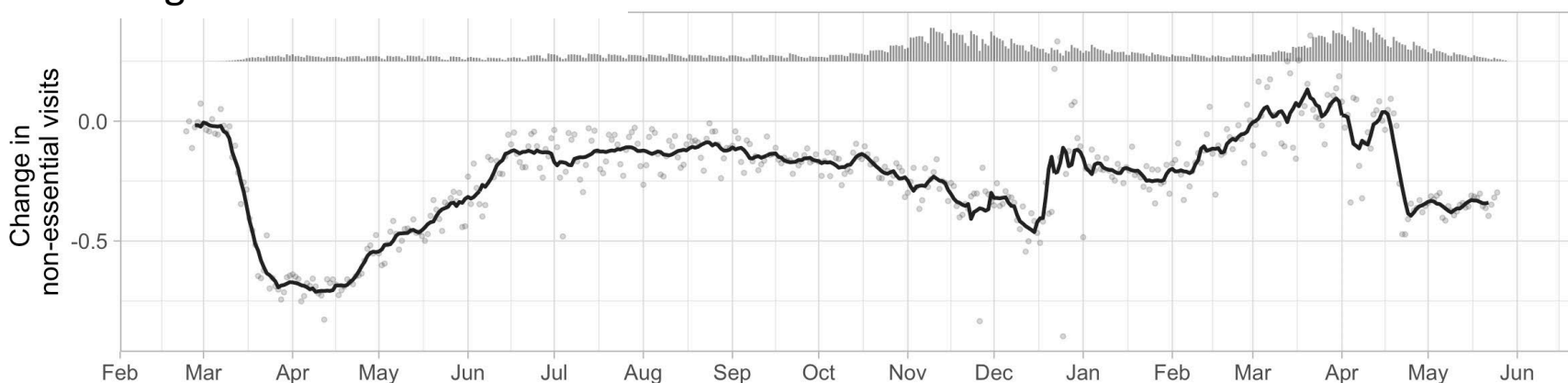Unacast social distancing scoreboard
https://www.unacast.com/covid19/social-distancing-scoreboard